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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,920	02/27/2002	Alan B. Nierenberg	124736-1040	4885
32294	7590	10/11/2005		
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER CIRIC, LJILJANA V	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,920

Applicant(s)

NIERENBERG, ALAN B.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the reply filed on July 28, 2005.
2. Claims 1 through 7 remain in the application, of which claims 4 through 7 remain withdrawn as being drawn to a previously non-elected invention.

Response to Arguments

3. Applicant's arguments filed on July 28, 2005 have been fully considered but they are generally not persuasive.

For example, in response to the examiner's rejection of the claims under 35 U.S.C. 112, second paragraph, as cited in the previous Office action, applicant states that "the specification clearly describes how the heat exchanger is configured to heat the intermediate fluid" and refers to paragraphs 0020 and 0021 of the specification for a description of how the heat exchanger allows for transfer of heat from the surrounding sea water to the intermediate fluid. However, paragraphs 0020 and 0021 do not describe any particular structural configurations of the heat exchanger which enable the heat exchanger to heat the intermediate fluid as currently recited in claim 1. Thus, applicant's arguments are not found persuasive with regard to the indefiniteness rejection and the same is repeated hereinbelow.

In response to applicant's argument that the Moss Maritime A.S. reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a self-contained LNG carrier is provided wherein liquid natural gas can be regasified either onshore or offshore"; "an intermediate fluid, *other than sea water or LNG*") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the Moss Maritime A.S. reference also fails to disclose an LNG carrier for transporting LNG from one location to another, a recitation of the intended use of the

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claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, Moss Maritime A.S. shows a vessel or carrier 1 including a tank 4 in which LNG is stored; hence, the prior art structure is capable of performing the intended use.

As a preface to the following traversal of applicant's arguments that the Moss Maritime A.S. reference fails to disclose or suggest an at least partially submerged heat exchanger for heating an intermediate fluid as recited in claim 1 of the instant application, the examiner notes that the claims in a pending application should be given their *broadest* reasonable interpretation. See In re Pearson, 181 USPQ 641 (CCPA 1974). Despite applicant's arguments to the contrary, that portion of the seawater which is pumped into the shell 15 of the at least one heat exchanger and past the vaporizer pipe 6 could be reasonably read on "an intermediate fluid" as broadly interpreted and as recited in claim 1 of the instant application.

Furthermore, the intermediate fluid as recited in claim 1 is merely a material that is worked upon by the claimed apparatus. It is hereby noted that "expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

Applicant's arguments thus do not comply with 37 CFR 1.111(c) because they do not clearly point out the *patentable* novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Election/Restrictions

4. Claims 4 through 7 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 3, 2003.

Claim Objections

5. Claims 1 through 3 are objected to because of the following informalities: “an” immediately preceding “LNG carrier” [claim 1, line 3] should be replaced with “the” for improved clarity; “at least one partially submerged” should be inserted immediately preceding “heat exchanger” [claim 1, lines 6-7; claim 3, line 1] for improved consistency and clarity; and, “at least one partially” should be inserted immediately preceding “submerged heat exchanger” [claim 2, line 1] for improved consistency and clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1 through 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is still not clear which specific structural configurations of the at least one heat exchanger are encompassed by the limitations “the at least one heat exchanger is *configured to heat said intermediate fluid*” as recited in claim 1, thus rendering indefinite the metes and bounds of protection sought by claim 1 and claims 2 and 3 depending therefrom.

Also with regard to claim 1 as written, it is also not clear whether the water in which the at least one heat exchanger is submerged is water in which the carrier is floating or water aboard the LNG carrier.

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Claim 3 recites the limitation "the LNG carrier hull" in lines 1-2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Upon reconsideration, claims 1 through 3 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: any structural element(s) through which the intermediate fluid circulates between the vaporizer and the at least one submerged heat exchanger as recited in base claim 1.

Upon reconsideration, claims 1 through 3 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are, for example: the ones between the at least one partially submerged heat exchanger, the vaporizer, and the at least one pump.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. As best can be understood in view of the indefiniteness of the claims, claims 1 through 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Moss Maritime A.S. (WO 01/03793 A1, previously of record).

Moss Maritime A.S. discloses an LNG carrier or vessel 1 including at least one heat exchanger 15 at least partially submerged in water and a pipeline 6 readable on the vaporizer as recited in the claims of the instant application. The at least one heat exchanger 15 is attached to an exterior surface of the LNG carrier or vessel 1 and, at least as broadly interpreted as required, is integral therewith.

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The reference thus reads on the claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene, can be reached at 571-272-4930.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ljiljana (Lil) V. Ciric
Primary Examiner
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